APPENDIX E - SITE STORMWATER MANAGEMENT CHECKLIST

Site Stormwater Management Checklist

City of Franklin

Project Name: _____

Date Submitted: _____

Project Location : _____
(general description of nearby streets):

Watershed Name(s): _____
(From City's Stormwater Management Plan)

Subwatershed Name(s): _____
(From City's Stormwater Management Plan)

Existing area of impervious surface:	_____ Acres
Area of impervious surface after project completion:	_____ Acres
Difference:	_____ Acres

[If difference < 0.5 acres, stop; if difference ≥0.5 acres, proceed with checklist.]

Water Quantity Design

Existing Conditions

Number of outfalls: _____

Table 1 - Existing Watershed Characteristics

Watershed Name/Number (Project Specific)	Area [Acres]	Percent Impervious	Hydrologic Soil Group(s)	Runoff Curve Number (RCN)	Time of Concentration (Tc)* [min]	Peak Runoff Flow † Q_2 [cfs]	Peak Runoff Flow † Q_{100} [cfs]
Total Site			—		—		*(flows to be added hydraulically)*
Offsite Contribution							

Proposed Conditions

Number of outfalls: _____

Table 2 - Proposed Watershed Characteristics

Watershed Name/Number (Project Specific)	Area [Acres]	Percent Impervious	Hydrologic Soil Group(s)	Runoff Curve Number (RCN)	Time of Concentration (Tc)* [min]	Peak Runoff Flow † Q_2 [cfs]	Peak Runoff Flow † Q_{100} [cfs]
Total Site			—		—		*(flows to be added hydraulically)*
Offsite Contribution							

* - Include calculations for Times of Concentration

† - See Page 4 for rainfall depth, duration, and distribution

Project Name: _____

Water Quantity Design (continued)

Summary of On-site detention

Table 3 - Pond Characteristics

Pond Name/Number	Contributing Watershed Names(s) (from Table 2)	Total Area to Pond [Acres]	Peak Inflow † Q_2 [cfs]	Peak Inflow † Q_{100} [cfs]

Table 4 - Pond Storage Volume

Pond Name/Number	NWL [Elevation]	Area [Acres]	Top of Pond [Elevation]	Area [Acres]	Storage Volume [Ac·ft]

Table 5 - Discharge Characteristics

Pond Name/Number	Discharge Pipe Size and Material	Peak Outflow † Q_2 [cfs]	Peak Outflow † Q_{100} [cfs]	Peak Elevation $Elev_2$	Peak Elevation $Elev_{100}$	Maximum Runoff Release Rate ‡ 2-year [cfs/acre]	Maximum Runoff Release Rate ‡ 100-year [cfs/acre]

Describe the characteristics of the downstream stormwater feature for each detention pond. (I.e. Is the downstream feature a wetland, ditch, storm sewer, etc. Does it have a tailwater elevation that affects the discharge of the pond):

† - See Page 4 for rainfall depth, duration, and distribution

‡ - See Page 4 for Runoff Release Rate Values

Site Stormwater Management Checklist

Project Name: _____

Water Quality Design

Table 6 - Pond Permanent Pool

Pond Name/Number	Total Area to Pond [Acres]	Permanent Pool†					
		Surface Area [Acres]	Percent of Watershed [%]	Max. Depth [feet]	Avg. Depth [feet]	Pool Volume [Ac·ft]	Required Volume [Ac·ft]

Table 7 - Pond Cells

Pond Name/Number	Forebay†			
	Forebay Included		Surface Area [Acres]	Percent of Permanent Pool [%]	Number of Cells Excluding Forebay
	☐ Yes	☐ No			
	☐ Yes	☐ No			
	☐ Yes	☐ No			
	☐ Yes	☐ No			
	☐ Yes	☐ No			

Pond Configuration†

Table 8 - Pond Configuration

Pond Name/Number	Side Slopes			Emergency Spillway	
	Above NWL	Safety Shelf	Below NWL	Invert Elevation	Width [feet]

Stormwater Management Plan

Table 9 - Additional Information

- ☐ SWMP Narrative
- ☐ Erosion Control Plan
- ☐ Outlet Control Structure Detail
- ☐ Vegetation/Planting Plan
- ☐ Pond Access Location
- ☐ Pond Maintenance Plan
- ☐ Topographic Map of Surrounding Area
- ☐ Site Drainage Plan (includes grading plan and plan view of storm sewer system with pipe sizes)
- ☐ Interim SWMP

†- See Page 4 for water quality design criteria
†- See Page 4 for pond configuration standards

†

2-year rain event(50% recurrence): 2.6 inches of rain, 24 hour duration, SCS type II distribution
100-year rain event(1% recurrence): 5.5 inches of rain, 24 hour duration, SCS type II distribution

Q_2 means the peak flow due to the 2-year rain event

Q_{100} means the peak flow due to the 100-year rain event

†

Maximum Runoff Release Rate according to Milwaukee Metropolitan Sewage District Chapter 13 Surface Water and Stormwater Rule:

Rain Event	Maximum Release Rate
2-year	0.15 cfs/acre
100-year	0.50 cfs/acre

†

Water Quality Design Criteria:

- Permanent Pool Surface Area to be 1.0% of drainage area for residential development, 2.0% of the drainage area for business and institutional development, and 2.5% of drainage area for commercial and manufacturing development
- Maximum depth of the Permanent Pool ≥ 4 feet
- Permanent Pool Volume to be equal to or greater than the runoff volume resulting from a 1.5-inch, 4-hour rainfall, with a SCS Type II distribution over the drainage area under post-developed conditions
- A sediment forebay, located at the pond inlet, is required. It shall be a minimum of 12% of the Permanent Pool Surface Area.

†

Pond Configuration Standards:

- Side slopes to be a maximum of 4 horizontal to 1 vertical above and below the pond normal water level (with the exception of the safety shelf)
- A safety shelf is required for all ponds. The shelf shall be located from pond normal water level to one foot below normal water level. The maximum slope shall be 10 horizontal to 1 vertical. The minimum width shall be 10 feet.
- An emergency spillway is required for all ponds.